UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,544	10/23/2003	Wim Henderickx	Q77528	6418

23373 7590 06/12/2007	EXAMINER
SUGHRUE MION, PLLC	SONI, KETAN S
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SUITE 800	ART UNIT
WASHINGTON, DC 20037	2616

	PAPER NUMBER

MAIL DATE	DELIVERY MODE
06/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/690,544	HENDERICKX ET AL.
	Examiner	Art Unit	
	Ketan Soni	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10/23/03_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-9_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-9_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _10/23/2003_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement submitted on Oct 23, 2003 has been considered

by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent,
published under section 122(b), by another filed in the United States before the invention by the applicant for
patent or (2) a patent granted on an application for patent by another filed in the United States before the
invention by the applicant for patent, except that an international application filed under the treaty defined in
section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2) of such
treaty in the English language.

Claims **1-9** are rejected under 35 U.S.C. 102(e) as being anticipated by DiBiasio et al.

(US Patent # 7225271 B1).

Consider **claim: 1**, DiBiasio et al. discloses a telecommunication router (Fig 4, 5)

connected to a termination link and comprising a processor (Fig 5 @ 510, Queue

Selector/Scheduler) adapted to handle packets of data received from said link (see Fig

4, 5), characterized in that said telecommunication router further comprises a plurality of queues adapted to store packets of data (figure: 5 @ 506) prior to be transferred to said processor, and a packet classifier (fig 5 @ 502) adapted to receive packets of data from said termination link, to classify the received packets according to predetermined types (Priority types, column: 7, lines: 6-20; and flow diagram: 6B), and to forward classified packets towards one queue out of said plurality, said one queue being selected according to the type of the forwarded packet (realtime packets or non real-time packets), in that each of said predetermined types (data type i.e. voice or data) is associated to a predetermined priority (Priority relates to data type),

and in that said processor is adapted to retrieve packets of data from the queues of said plurality according to predetermined priority rules (The top level in the hierarchy preferably uses a priority queuing algorithm with the PQ 504 being served at the highest priority while the reserved queues 506 and the default queue 508 are served at the bottom or lowest priority, column: 7, lines: 27-30).

Consider **claim: 2,** and as applied to claim: 1 above, DiBiasio et al. discloses the telecommunication router, characterized in said processor is adapted to retrieve packets of data from a queue associated to a relative high predetermined priority prior to retrieve packets of data from another queue associated to a relatively lower predetermined priority. (Queue selector/scheduler 510 is preferably a multi, level hierarchical

scheduler. The top level in the hierarchy preferably uses a Priority queuing algorithm with the PQ 504 being served at the highest priority while the reserved queues 506 and the default queue 508 are served at the bottom or lowest priority, column: 7, lines: 26-31).

Consider **claim: 3**, and as applied to claim: 1 above, DiBiasio et al. discloses the telecommunication router, characterized in that said packet classifier is adapted to estimate said predetermined priority by analyzing the content of a packet and to forward the analyzed packet to the queue corresponding to the estimated priority (In particular, each reserved queue 506a d and the default queue 508 is assigned its own weight based on packets content, and packets are drained from the reserved and default queues 506, 508 based on the assigned weights, column: 7, lines: 36-40).

Consider **claim: 4**, and as applied to claim: 1 above, DiBiasio et al. discloses the telecommunication router, characterized in that each queue of said plurality of queues is controlled by a queue manager adapted to discard packets coming from said packet classifier when a predetermined threshold filling level of the queue is reached (The admission control entity 430, using the contents of the flowspec spec object 806 of the Resv message 800, then determines whether sufficient available bandwidth also exists at the interface, column: 10, lines: 56-59; additionally if there is not enough bandwidth there is or insufficient available bandwidth, the RSVP engine 424 directs its message generator 426 to formulate a reservation error (ResvErr) message, which is then sent

back toward the destination/receiving entity, i.e., voice agent 204, as indicated at block

634, column: 11, lines: 42-45).

Consider **claim: 5,** and as applied to claim: 4 above, DiBiasio et al. discloses the

telecommunication router, characterized in that each queue of said plurality of queues

may have a different predetermined threshold filling level (As shown in figure: 6B, step

622, flow analyzer 432 determines whether corresponding traffic carries real time traffic

or non real time traffic. The flow analyzer 432 then selects and assigns an appropriate

queue and/or queue servicing algorithm or selection strategy to the real-time voice

traffic flow and non real time traffic flow, column: 10, lines: 37-40).

Consider **claim: 6,** and as applied to claim: 1 above, DiBiasio et al. discloses the

telecommunication router, characterized in that said processor (PROC) is adapted to

retrieve packets of data from said queues according to the load of said processor (The

admission control entity 430 then determines whether the output interface 406b has

sufficient available bandwidth to support the reservation in the same manner as

described above. Assuming there is sufficient available bandwidth as well, the RSVP

engine 424 then assigns and reserves the resources, as shown in fig: 6C, block: 630

column: 13, lines: 8-12).

Consider **claim: 7**, and as applied to claim: 1 above, DiBiasio et al. discloses the telecommunication router, characterized in that a plurality of termination links (TL) are connected to said packet classifier (As shown in figure: 5, plurality of input packets 514 are connected to classification engine 502).

Consider **claim: 8**, and as applied to claim: 1 above, DiBiasio et al. discloses the telecommunication router, characterized in that a plurality of processors are adapted to retrieve packets of data from said queues. (As shown in figure: 4, pluralities of processors are used for Packet receiver, traffic scheduling, forwarding engine, RSVP engine).

Consider **claim: 9**, and as applied to claim: 1 above, DiBiasio et al. discloses the telecommunication router, characterized in that said packet classifier (CL) is adapted to forward to an output port of said telecommunication router packets that are not intended to said processor (The flow analyzer 432 determines whether the respective values from the flow spec object 806 satisfy the above set of heuristics, as indicated at decision block 622. If they do, the flow analyzer 432 "concludes" that the corresponding traffic flow will be carrying real-time voice traffic, as indicated by block 624. The flow analyzer 432 then selects and assigns an appropriate queue and/or queue servicing algorithm or selection strategy to the real-time voice traffic flow, as indicated at block 626, column: 10, lines: 35-42).

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

- Lin et al. (U.S. Patent # 7106731 B1) discloses: Router with class of service mapping.

- Olkkonen et al. (U.S. Patent # 6407999 B1) discloses: Method and router in a packet network with priority class.

- Elwalid et al. (U.S. Patent # 6353616 B1) discloses: Adaptive processor scheduler and method for reservation protocol message processing.

- Karri et al. (U.S. Patent # 7212495 B2) discloses: Signaling for reserving a communications path.

- Terrell et al. (U.S. Pub # US 20030210686 A1) discloses: ROUTER AND METHODS USING NETWORK ADDRESSES FOR VIRTUALIZATION

- Ma et al. (U.S. Patent # 6798743 B1) discloses: Packet prioritization processing technique for routing traffic in a packet-switched computer network

❏   Tsuchiya et al. (U.S. Pub # 20020090002 A1) discloses: Multicast routing method

and an apparatus for routing a multicast packet.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ketan Soni whose telephone number is (571) 270-1782.

The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Vanderpuye, Kenneth can be reached on 571-272-3078. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028. If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Ketan Soni

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May 31, 2007.

KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER